

WHAT IS CLAIMED IS:

1. A printhead in which a plurality of printing elements arranged in a predetermined direction and a driving circuit for driving the printing elements are
5 formed on a single substrate,
wherein the printing elements are classified into a plurality of groups and driven,
and said printhead including,
a selection circuit which is common to the
10 plurality of groups and selects a printing element to be driven in each group, and
data supply circuits for supplying driving data to the driving circuit for driving each printing element through any of a plurality of paths are
15 arranged on the substrate.
2. The printhead according to claim 1, wherein the data supply circuits supply the driving data through a path which shortens a wiring line to each printing element.
- 20 3. The printhead according to claim 1, wherein the data supply circuits are arranged on two sides of a printing element array.
4. The printhead according to claim 1, wherein the data supply circuits include a plurality of shift
25 registers for receiving clock and data signals, a plurality of latches for latching output signals from the shift registers, and AND circuits for performing a

logical product of outputs from the latches and a driving signal.

5. The printhead according to claim 1, wherein the printhead includes an inkjet printhead for printing data by discharging ink.

6. The printhead according to claim 5, wherein the printhead includes a printhead for discharging the ink by using thermal energy, and comprises an electrothermal transducer for generating thermal energy to be applied to the ink.

7. A head cartridge characterized by comprising:
the printhead in which a plurality of printing elements arranged in a predetermined direction and a driving circuit for driving the printing elements are formed on a single substrate, wherein the printing elements are classified into a plurality of groups and driven, and said printhead includes, a selection circuit which is common to the plurality of groups and selects a printing element to be driven in each group, and data supply circuits for supplying driving data to the driving circuit for driving each printing element through any of a plurality of paths are arranged on the substrate; and

an ink tank for storing ink to be supplied to the printhead.

8. A printing apparatus for printing data by using the printhead in which a plurality of printing elements

arranged in a predetermined direction and a driving circuit for driving the printing elements are formed on a single substrate, wherein the printing elements are classified into a plurality of groups and driven, and
5 the printhead including a selection circuit which is common to the plurality of groups and selects a printing element to be driven in each group, and data supply circuits for supplying driving data to the driving circuit for driving each printing element
10 through any of a plurality of paths are arranged on the substrate, comprising

driving data generation means for generating a data signal for each path of the data supply circuit.

9. A printhead element substrate in which a
15 plurality of printing elements arranged in a predetermined direction and a driving circuit for driving the printing elements are formed on a single substrate, wherein

the printing elements are classified into a
20 plurality of groups and driven, and the printhead element substrate including,

a selection circuit which is common to the plurality of groups and selects a printing element to be driven in each group, and

25 data supply circuits for supplying driving data to the driving circuit for driving each printing element through any of a plurality of paths are

arranged on the substrate.

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